

AMENDMENTS TO THE CLAIMS

Please cancel claims 46 and 50, amend claims 28-32, 34, 35, 38-43, and 47-49, and add new claims 51-54, as follows:

1-27. (Canceled)

28. (Currently Amended) A ~~retro-reflective~~ marker system for use in a patient treatment system comprising:

a raised reflective surface; and

a flat surface located at the base of the raised reflective surface.

29. (Currently Amended) The ~~retro-reflective marker~~ system of claim 28 in which the raised reflective surface comprises a hemispherical shape.

30. (Currently Amended) A marker ~~block~~ system for use in a patient treatment system comprising:

a surface area;

a first reference location on the surface area;

a second reference location on the surface area; and

the first reference location and the second reference location positioned on the surface area such that both reference locations are simultaneously detectable by an optical imaging apparatus.

31. (Currently Amended) The ~~marker block~~ system of claim 30 in which the first and second reference locations comprise retro-reflective material.
32. (Currently Amended) The ~~marker block~~ system of claim 30 ~~comprising a shape that matches~~ 48, wherein said structure is sized to fit a patient body location.
33. (Canceled)
34. (Currently Amended) The system of claim ~~50~~ 53 in which said two or more reflective elements are retro-reflective elements.
35. (Currently Amended) The system of claim ~~50~~ 53 in which said marker block is shaped to fit a specific body location.
- 36-37. (Canceled)
38. (Currently Amended) The system of claim ~~50~~ 54 in which absolute coordinate of said one or more optical imaging apparatus is known.
39. (Currently Amended) The system of claim ~~50~~ 54 in which viewing orientation of said one or more optical imaging apparatus is known.

40. (Currently Amended) The system of claim ~~50~~54 in which relative absolute coordinate of said one or more optical imaging apparatus is known.
41. (Currently Amended) The system of claim ~~50~~54 in which said one or more optical imaging apparatus comprises CCD cameras.
42. (Currently Amended) The system of claim ~~50~~53 further comprising a computing device to receive output information from said one or more optical imaging apparatus, the computing device having a processor configured to determine the position and orientation of said marker block.
43. (Currently Amended) The system of claim ~~50~~53 further comprising a video display device to display a video image of ~~said a~~ patient.
44. (Previously Presented) The system of claim 43 in which said video image comprises real-time images of said marker block.
45. (Previously Presented) The system of claim 43 in which said video image comprises real-time images of said patient.
46. (Canceled)

47. (Currently Amended) The ~~retro-reflective marker system~~ of claim 28 in which said flat surface forms a mounting area.

48. (Currently Amended) The ~~marker block system~~ of claim 30 ~~that~~, wherein at least a portion of said surface area is formed of comprises Styrofoam.

49. (Currently Amended) The ~~marker block system~~ of claim 30 ~~comprising a shape to fit~~, wherein said surface area is a portion of a structure, said structure configured to couple to a fixture that attaches to a patient body.

50. (Canceled)

51. (New) The system of claim 28, further comprising an optical imaging apparatus for viewing said reflective surface.

52. (New) The system of claim 30, further comprising said optical imaging apparatus.

53. (New) A marker system, comprising:

a marker block having a surface;

two or more reflective elements located on said surface, said two or more reflective elements having known relative positioning; and

said marker block positioned such that at least two of said two or more reflective elements are viewable by one or more optical imaging apparatus.

54. (New) The system of claim 53, further comprising said one or more optical imaging apparatus.